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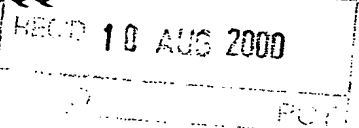
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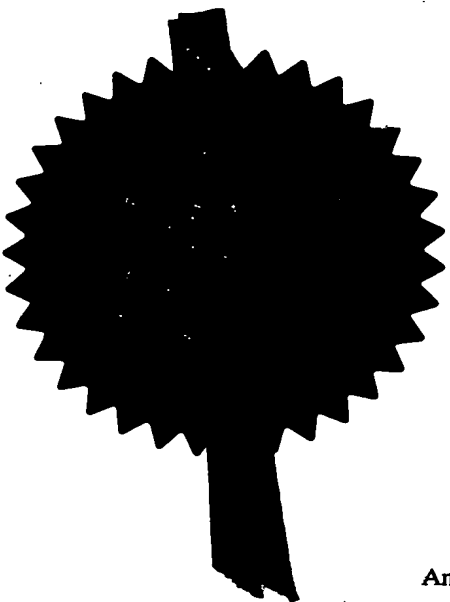
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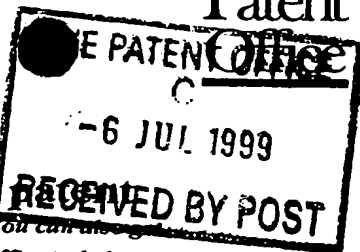
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Signed *Andrew Gersey*
Dated 17-July 2000

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06 JUL 99 E459684-1 D10002
P01/7700 0.00 - 9915653.1

Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road
Newport
Gwent NP9 1RH

1. Your reference

tbr.626.uk.dak1

2. Patent application number

(The Patent Office will fill in this part)

9915653.1

06 JUL 1999

3. Full name, address and postcode of the or of each applicant (underline all surnames)

Terry Bruce
11 Buckie Walk
Bridge of Don
ABERDEEN
AB22 8DF
United Kingdom

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

7636 962 001
df

4. Title of the invention

Hose clamp

5. Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

Kennedy & Co.
Floor 4, Queens House
29 St Vincent Place
GLASGOW
G1 2DT
United Kingdom

Patents ADP number (if you know it)

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number
(if you know it)

Date of filing
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

no

- a) any applicant named in part 3 is not an inventor, or
 - b) there is an inventor who is not named as an applicant, or
 - c) any named applicant is a corporate body.
- See note (d))

Patents Form 1/77

9. Enter the number of sheets of any of the following items you are filing with this form. Do not count copies of the same document.

Continuation sheets of this form

Description 5

Claim(s)

Abstract

Drawing(s) 4 

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11. I/we request the grant of a patent on the basis of this application.

Signature 
KENNEDY & CO.

Date
5 July 1999

12. Name and daytime telephone number of person to contact in the United Kingdom
David Kennedy
tel: 0141 226 6826

Warning

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Notes

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- For details of the fee and ways to pay please contact the Patent Office.

1 Hose Clamping Device

2

3 The present invention relates to a device for securing
4 hoses, particularly those used by fire fighters.

5

6 When fighting a fire there are a number of problems to be
7 addressed in addition to extinguishing the fire, for
8 example rescuing those who are trapped or crowd control.
9 As a result the available human resources need to be
10 carefully targeted to limit/prevent the occurrence of
11 injury.

12

13 The present invention recognises that as part of fire-
14 fighting the use and control of a hose is an onerous task
15 requiring the efforts of several people. The present
16 invention attempts to mitigate this problem and allow for
17 better targeting of available resources.

18

19 It is an object of the present invention to provide a
20 device whereby a hose can be clamped to a support thus
21 allowing fire fighters to be released from such duties
22 and available for other tasks, for example rescuing those
23 who are trapped. It is a further object that such a

1 device will be simple to use and readily adapted to the
2 dimensions of different hoses.

3

4 According to the present invention there is provided a
5 ~~hose clamping device comprising a connector, means for~~
6 ~~securing a hose and means for securing said connector to~~
7 ~~a support structure.~~

8

9 The respective securing means are each typically provided
10 in the form of a clamp, although any suitable means may
11 be used.

12

13 Preferably the respective securing means are provided
14 with means, in the form of arms, for attachment to the
15 ~~connector.~~

16

17 ~~Optionally the connector is provided with means to secure~~
18 ~~the respective securing means in fixed orientations. The~~
19 ~~securing means are fixed using retaining means.~~

20

21 Alternatively the respective securing means may be
22 ~~allowed to freely rotate in the connector.~~

23

24 The connector may itself be provided with supporting
25 means, for example a brace.

26

27 The hose clamping device may be attached to any suitable
28 support, for example a beam, pipework, a handrail or a
29 tripod.

30

31 In order to provide a better understanding of the
32 invention embodiments will now be described by way of
33 example only with reference to the accompanying Figures
34 in which:

Figure 1 illustrates a clamp for securing a hose in accordance with the present invention;

Figure 2 illustrates a tripod on which the clamp of Figure 1 can be mounted;

Figures 3a and 3b illustrates a pipe work clamp that can be inserted into the clamp of Figure 1;

Figure 4 illustrates an alternative clamp that can be inserted into the clamp of Figure 1; and

Figure 5 illustrates a clamp specifically designed for a number II fire hose that can be inserted into the clamp of Figure 1.

Referring firstly to Figure 1, a hose clamping device is generally depicted at 1 comprising a connector or main body 2, means 3 for securing a hose, and means 4 for securing the device 1 to a support.

The main body 2 is provided with openings 5 and 6 into which may be inserted the securing means 3 and 4 respectively. The securing means are each provided with an arm, 7 and 8 respectively, for insertion into the openings 5 and 6.

The means 3 and 4 can be secured in their respective aperture by securing rings 9 and 10, which can be adjusted by screws 11 and 12.

1 The securing means 3 is also provided with sliding lock
2 plates 13 to retain a hose. It is envisaged that the
3 securing means 3 would be attached to fire hose at a
4 coupling or similar reinforced point on the hose.

5

6 Figure 2 illustrates a tripod 14 upon which the device 1
7 can be mounted. The tripod 14 is provided with
8 adjustable legs 15 and a cross brace 16 to provide
9 additional strength. The tripod 14 can act as a support
10 for the device 1.

11

12 Figures 3a and 3b illustrate example means 17 for
13 securing the clamp to a pipe. The means 17 is provided
14 with a serrated die 18 which improves the grip of the
15 clamp and "ratchet lashings" (not shown) to hold the
16 clamp in a closed position. The "Ratchet lashings" are
17 connected to the securing means 17 by the hook 19 and
18 receiving apertures 20.

19

20 Figure 4 illustrates an alternative securing means 21.

21 Typically this securing means is used in connection with
22 a beam. A screw 22 is provided to secure the clamp to
23 the beam.

24

25 In Figure 5 a hose clamp suitable for use with a number
26 II hose is depicted at 23. The clamp 23 is provided with
27 arms 24a and 24b which are connected via an axle 25. The
28 arm 24a is able to move around the axle 25 such that a
29 hose can be placed in the clamp 23. A bolt 26 secures a
30 hose in the clamp prior to use.

31

32 The clamp 1 is used by fixing the securing means 3 to a
33 hose and the securing means 4 to a support structure.
34 The securing means 3 and 4 can then be locked in specific

1 orientations relative to the device 1. The precise
2 nature of the use of the hose will determine whether the
3 securing means are fixed or are free to rotate. Once
4 secured in the clamp, a user such as a fire fighter is
5 then free to attend to other emergency procedures.

6
7 The use of the alternative clamps, as illustrated in
8 Figures 2-5, is determined by the nature of the
9 emergency, for example different hoses may require to be
10 used.

11
12 An advantage of the present invention is that there is
13 provided a hose clamp which can be used with known types
14 of hose and whose parts are readily interchanged to meet
15 the requirements of different emergency situations.

16
17 A further advantage of the present invention is that
18 there is provided means which will reduce the manpower
19 required to control a hose, and increase the numbers
20 available to help those who are part of the emergency
21 situation.

22
23 A further advantage of the invention is that the
24 individual securing means are able to rotate such that
25 the hose can be used in any direction thus allowing the
26 changing needs of an emergency situation to be met.

27
28 In an alternative embodiment the clamp may be provided
29 with means to enable control from a remote source.

30
31 Further modifications and improvements may be added
32 without departing from the scope of the invention herein
33 intended.

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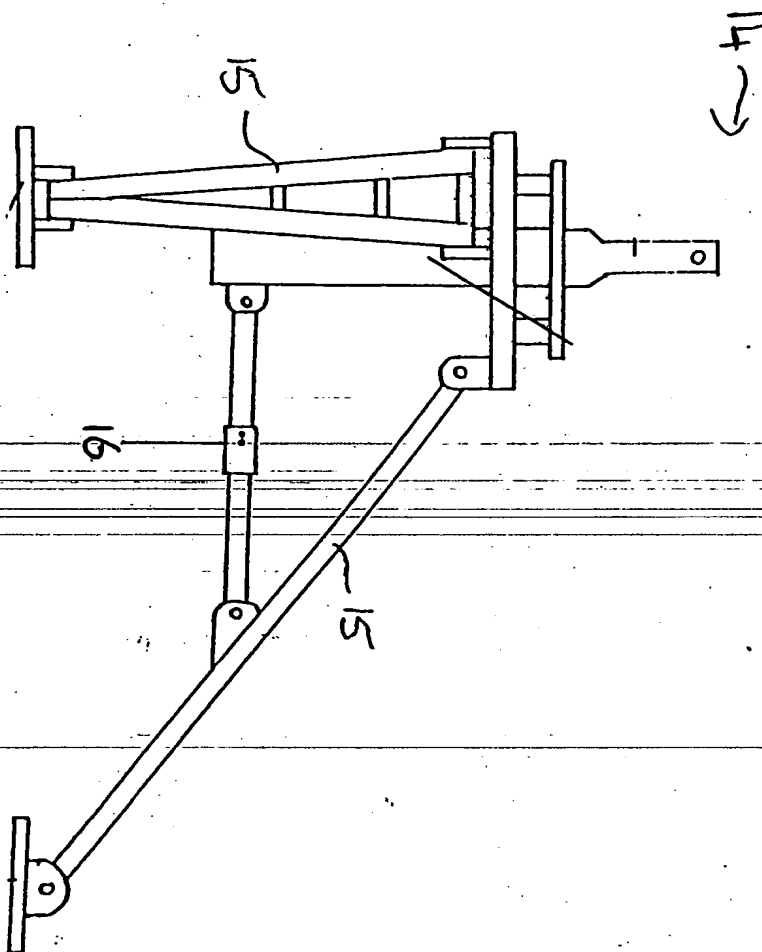


Fig. 2

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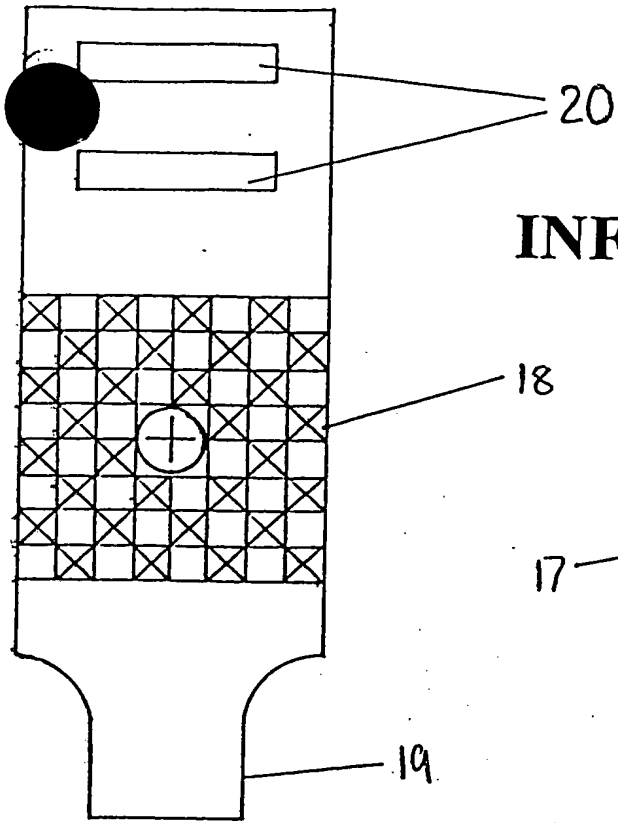


FIGURE 3a

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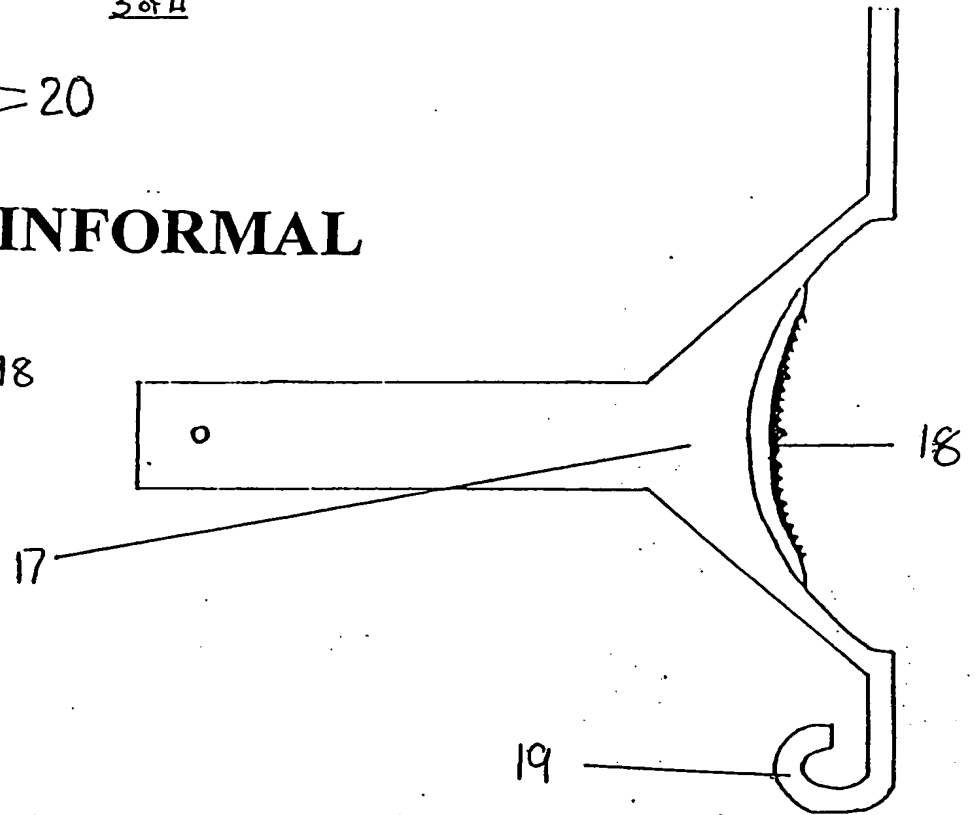


FIGURE 3b

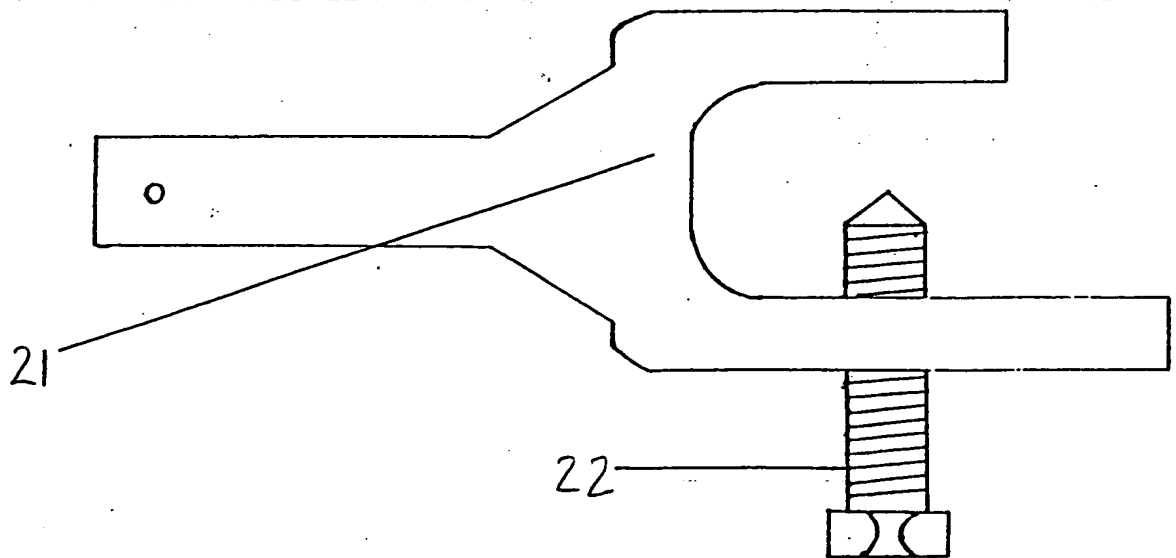
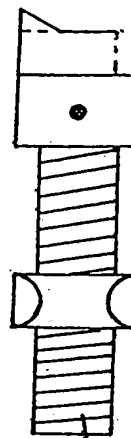


FIG 4

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24a

23



26

24b

25

INFORMALfig 5

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